

### REMARKS

Applicant requests favorable reconsideration of this application in view of the foregoing amendments and the following remarks. Claims 1-4 were pending in the application and were rejected in the Office Action. By way of this amendment, Applicant has: (a) cancelled claims 1-4, without prejudice or disclaimer; and (b) added new claims 5-15. Accordingly, claims 5-15 are respectfully presented for further consideration.

#### **1. Information Disclosure Statement and Claim for Convention Priority**

Applicant respectfully requests an indication that the Examiner has considered the reference submitted with the Information Disclosure Statement ("IDS") filed on December 15, 2003. Of course, such an indication may be provided by way of Examiner initials on the form PTO/SB/08 that was submitted along with the IDS.

In addition, Applicant also respectfully requests that the next paper issued by the Patent Office include an acknowledgment that the certified copy of the priority document was received; the certified copy of JP 2002-363703 (which was filed on December 16, 2002) was submitted with the instant application on December 15, 2003.

#### **2. Objection to the Specification**

The Examiner objected to the specification for various typographical issues, each of which has been fully resolved by way of the amendments made herein to the specification. Accordingly, as the grounds for the objection are now moot, a withdrawal of the objection is both warranted and earnestly solicited.

#### **3. Rejections of Claims 1-4 (Claims 5-8)**

The Examiner rejected: (a) claims 1 and 2 under 35 U.S.C. § 103(a) as allegedly being obvious when considering: (i) U.S. Patent No. 5,612,671 ("Mendez") in view of U.S. Patent No. 6,072,388 ("Kyrtos"); and (ii) Mendez in view of DE 42 32 240 ("Rambock"); and (b) claims 3 and 4 under 35 U.S.C. § 103(a) as allegedly being obvious when considering Mendez in view of Kyrtos and further in view of U.S. Patent Application No. 2004/0127192 ("Ceresoli"). Preliminarily, these rejections are now technically moot due to the cancellation of claims 1-4, without prejudice or disclaimer. However, as new claims 5-8 recite subject matter that corresponds to claims 1-4, respectively, these rejections will be addressed as having been made to claims 5-8. For the following reasons, Applicant respectfully traverses each of these rejections.

**A. Rejections of Claims 1 and 2 (Claims 5 and 6)**

New claim 5 recites a tire pressure detecting apparatus for a vehicle. The tire pressure detecting apparatus includes, among other possible things (*italic emphasis added*):

- at least two terminals, each of the terminals comprising:
  - a tire pressure sensor configured to detect a tire pressure; and
  - a transmitter configured to transmit tire pressure data based on the detected tire pressure;
- at least two receivers; and*
- a controller,
- wherein each of the terminals is attached to a corresponding tire that is positioned in a respective area of the vehicle;
- wherein each of the receivers is attached to a part of the vehicle corresponding to an associated tire,
- wherein each of the receivers is configured to receive the tire pressure data transmitted by the transmitters and to detect a reception level of the received tire pressure data,
- wherein the controller is configured to identify the receiver that has the highest reception level,*
- wherein the controller is configured to obtain the tire pressure data from the identified receiver, and
- wherein the controller is configured to relate the obtained tire pressure data with the tire associated with the identified receiver.*

As hereafter explained, neither the combination of Mendez and Kyrtos nor the combination of Mendez and Rambock teaches or suggests such a tire pressure detecting apparatus.

Mendez teaches a tire pressure detecting apparatus in which each of the tires is equipped with a sender 14 that is equipped to emit a unique ID code. The signals (both ID code and tire pressure) transmitted by the senders 14 are received by an antenna 16 of a receiver 18 that, in turn, sends the signals to a processor 20. The processor 20 is configured to monitor the pressure in each tire associated with each particular ID code. As a result, if a car has four tires W, X, Y, and Z, the processor 20 is configured to determine when, for example, the tire pressure in tire X is too low. The processor 20, however, is not configured to determine which of the four tires on the car is tire X, *i.e.*, the processor 20 is not configured to know that tire X is the front right tire. *See col. 2, lines 35-52.*

In contrast to the signal receiver 18 in Mendez, claim 5 recites at least two receivers. Further, whereas the controller 20 in Mendez is only configured to obtain the tire pressure associated with each ID code, the controller recited in claim 5 is not only configured to obtain the tire pressure of each tire, the controller in claim 5 is also configured to identify the particular location of each tire. The controller recited in claim 5 is configured to identify the tire's particular location as a result of the ability of the controller to identify which receiver has the highest reception level, *i.e.*, the receiver closest to the tire (due to the attenuation of

the signal over the distance to the other receiver(s)). As a result, it is clear that Mendez fails to teach or suggest at least the following limitations of claim 5: (a) “the controller is configured to identify the receiver that has the highest reception level” and (b) “the controller is configured to relate the obtained tire pressure data with the tire associated with the identified receiver.” Moreover, neither Kyrtos nor Rambock cures these deficiencies of Mendez.

Kyrtos, which teaches a driveline sound monitor, fails to teach or suggest multiple receivers each of which receives a tire pressure signal. Accordingly, Kyrtos fails to cure the deficiencies of Mendez with respect to claim 1. Similarly, based on the limited English portion of Rambock, it appears that Rambock also fails to cure the deficiencies of Mendez. Rambock teaches a system by which a controller is configured to increase the tire pressure of a tire, if that tire’s pressure was too low. There is no teaching or suggestion, however, that the controller is also configured to identify the particular location of the tire on the automobile.

As none of Mendez, Kyrtos, and Rambock teaches or suggests a controller that is configured to identify the particular location of a tire, no combination of these references can be used to reject claim 5, or any claim dependent thereon, under 35 U.S.C. § 103(a). Moreover, as claim 6 depends from claim 5, claim 6 is also allowable over any combination of Mendez, Kyrtos, and Rambock, without regard to the other patentable limitations recited therein. Accordingly, claims 5 and 6 are allowable over Mendez, Kyrtos, and Rambock.

**B. Rejection of Claims 3 and 4 (Claims 7 and 8)**

Claims 7 and 8 depend from claim 5 and, therefore, recite each of the limitations of claim 1. As previously discussed, the combination of Mendez and Kyrtos fails to teach or suggest at least a controller that is configured to identify the particular location of a tire, as recited in claim 5. Ceresoli, which teaches a system and method for obtaining vehicle radio listener statistics, fails to cure this deficiency of Mendez and Kyrtos.

In light of the foregoing, as the combination of Mendez, Kyrtos, and Ceresoli fails to teach or suggest each of the limitations of claim 5, the combination can not be used to reject claim 5, or any claim dependent thereon, under 35 U.S.C. § 103(a). Moreover, as claims 7 and 8 depend from claim 5, each of these dependent claims is also allowable over the combination of Mendez, Kyrtos, and Ceresoli, without regard to the other patentable limitations recited therein. Accordingly, claims 5 and 6 are allowable over Mendez, Kyrtos, and Ceresoli.

**4. New Claims 9-15**

New claim 9 (*i.e.*, the claim from which claims 10-15 depend) recites a tire pressure detecting apparatus for a vehicle. This tire pressure detecting apparatus includes, among other possible things (*italic emphasis added*):

a plurality of terminals, wherein each of the terminals is positioned proximate a corresponding tire of the vehicle, wherein each of the terminals is configured to detect a tire pressure of the corresponding tire, and wherein each of the terminals is configured to transmit a tire pressure signal corresponding to the detected tire pressure; and  
*a controller, wherein the controller is configured to identify the pressure in, and the location of, each of the tires.*

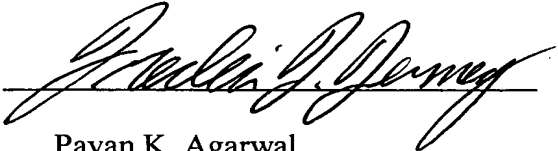
As previously discussed, none of Mendez, Kyrtos, Rambock, and Ceresoli, teaches or suggests a tire pressure detecting apparatus that is configured to: (a) monitor a tire pressure of a particular tire; and (b) identify the location of the particular tire. Accordingly, as claim 9 recites a controller that “is configured to identify the pressure in, and the location of, each of the tires,” claim 9 is allowable over Mendez, Kyrtos, Rambock, and Ceresoli. Moreover, as claims 10-15 depend from claim 9 each of these dependent claims is also allowable over Mendez, Kyrtos, Rambock, and Ceresoli, without regard to the other patentable limitations recited therein.

**CONCLUSION**

For the aforementioned reasons, claims 5-15 are now in condition for allowance. A Notice of Allowance at an early date is respectfully requested. The Examiner is invited to contact the undersigned if such communication would expedite the prosecution of the application.

Respectfully submitted,

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**AMENDMENTS TO THE DRAWINGS**

Figure 2 has been amended to replace reference numeral "11" with "111." The reason for this change is to distinguish between the voltage divider (which was previously labeled "11" in Figure 2) and the CPU (which was labeled "11" in Figure 3).